AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for modulating data for a polarity-alternated pulse width code division multiple access (PAPW/CDMA) system, the method comprising:

multiplying CDMA signals inputted from multiple channels by a mask pattern selected among predetermined mask patterns that have the least peak value;

reducing the level number of signals by ~~truncating~~equalizing multiplied CDMA signals according to a predetermined magnitude of levels;

converting the level number-reduced signals to pulse width signals to generate modulated signals having a constant level; and

alternately switching a starting polarity of the pulses of the modulated signals between "high" and "low".

2. (Original) The method of claim 1, wherein the selected mask pattern is explicitly transmitted via transmission channel.

3. (Withdrawn) A method for measuring a distance between two mobile stations using a polarity-alternated pulse width CDMA method, comprising:

transmitting a first frame by a first mobile station;

receiving the first frame by a second mobile station; and

transmitting a second frame by the second mobile station upon reception of the frame, wherein the first mobile station measure the distance by:

subtracting a frame length from an entire delay time to form a first value;

dividing the first value by 2 to form a second value; and

2

multiplying the second value by a transmission velocity of transmitted signals.

4. (Withdrawn) A method of operating a wireless radio to receive broadcasting within a predetermined area by using a distance measuring method according to claim 3, the method comprising:

searching synchronous signals transmitted by a base station nearby a mobile station, and requesting an access to the base station by the mobile station;

measuring a distance from the base station to the mobile station, and transmitting a measured distance value to the mobile station by the base station; and

receiving broadcasting of the base station if the measured distance value is within a range presented by the base station, and immediately stop receiving the broadcasting of the base station if the measured distance value is beyond the range presented by the base station to search for synchronous signals of other base station.